

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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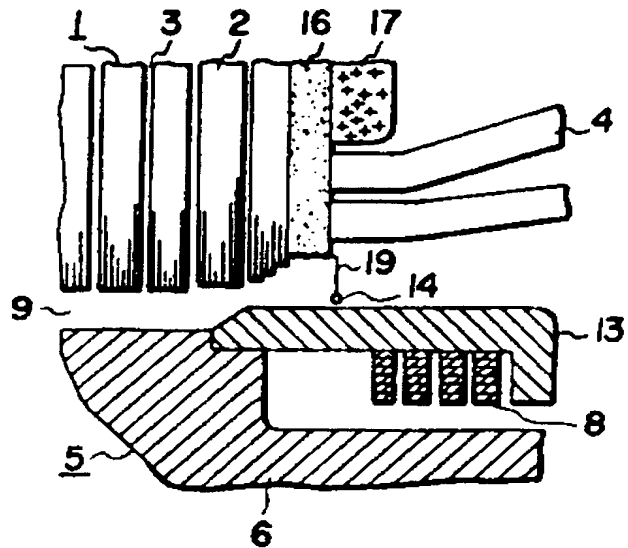
APPLICATION DATE : 14-08-79  
APPLICATION NUMBER : 54102738

APPLICANT : HITACHI LTD;

INVENTOR : TAKAHASHI NORIYOSHI;

INT.CL. : H02K 19/36

TITLE : DETECTOR FOR ABNORMALITY IN  
FIELD-WINDING AT  
REVOLVING-FIELD TYPE ROTARY  
MACHINE



**ABSTRACT :** PURPOSE: To detect a leaking magnetic flux in a condition having little influence of a main magnetic flux and to detect an interlayer short trouble of a field winding with a detected abnormal current by a method wherein a magnetic flux detector is provided outside core gap at a corresponding position in a vicinity of outside diameter side of a field winding.

CONSTITUTION: A search coil 14 is provided at a point outside the end surface of a stator core 2 of axial air gap 9 corresponding to a section extending to the axial direction of a field winding 8. Said search coil 14 has a mounting groove at the head of its end section spacer 16 and it is fixed by inserting the base section of an L-shaped supporting arm 19, to be used to fix a search coil 14, into said mounting groove. A nonmagnetic and nonconductive material is used for the supporting arm 19 and at the point of which a search coil 14 is tightly fixed with resin. As a result, a pulsating wave form of groove period is observed from a voltage wave form generated at the search coil 14 and an interlayer short can be detected accurately.

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